

Appl. No. 09/687,606
Amdt. dated January 14, 2004
Reply to Office Action of July 25, 2003

PATENT

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1. (currently amended) A radially expansible luminal prosthesis comprising:
a cylindrical frame having a distal end, a proximal end, a midsection therebetween, and an outer surface for insertion into a body lumen, wherein at least one end portion of the said frame has a continuous circumferential section that has a radial thickness greater than a radial thickness of a continuous circumferential section of the midsection is formed from material comprising radiolucent material, wherein the forming material varies in thickness over an axial length of the cylindrical frame, so that the radiopacity of the frame varies correspondingly.
 2. (currently amended) The [[A]] radially expansible luminal prosthesis as in claim 1, wherein the cylindrical frame comprises stainless steel ~~as the radiolucent material~~ and a radiopaque material is coated over the stainless steel at the at least one end portion of the frame.
 3. (currently amended) The [[A]] radially expansible luminal prosthesis as in claim 2, wherein the radiopaque material is selected from the group consisting of gold, platinum, platinum, iridium, tungsten, and tantalum.
 4. (currently amended) The [[A]] radially expansible luminal prosthesis as in ~~any of claim [[s]] 1 to 3~~ 2, wherein the radiopaque material is thicker near the ends of the cylindrical frame than over the midsection.
- Claims 5 - 7. (Cancelled)
8. (New) A radially expansible luminal prosthesis having a plurality of interconnected ring segments, comprising:
 - a. a first end ring segment;

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b. at least one intermediate ring segment which is longitudinally spaced from the first end ring segment and which has a continuous circumferential section having a thickness; and

c. a second end ring segment which is longitudinally spaced further from the first ring segment than the at least one intermediate ring segment and which has a continuous circumferential section surrounding the second end ring segment having a radial thickness greater than the radial thickness of the continuous circumferential section of the at least one intermediate ring segment.

9. (New) The intraluminal prosthesis of claim 8, wherein the at least one intermediate ring section is proximally adjacent to the second ring segment.

10. (New) The intraluminal prosthesis of claim 8, wherein the continuous circumferential section of the second ring segment is more radiopaque than the continuous circumferential section of the at least one intermediate ring segment.

11. (New) The intraluminal prosthesis of claim 10, wherein the continuous circumferential section of the second ring segment is formed in part of a radiopaque coating.

12. (New) The intraluminal prosthesis of claim 11, wherein the radiopaque coating on the continuous circumferential section of the second ring segment is formed by dipping the second ring segment of the prosthesis in a bath of radiopaque material.

13. (New) The intraluminal prosthesis of claim 8, wherein the continuous circumferential section of the second end ring segment is formed in part of radiolucent material.

14. (New) The intraluminal prosthesis of claim 8, wherein the second ring segment is at a distal end of the prosthesis.

15. (New) The intraluminal prosthesis of claim 8, wherein the first end ring segment has a continuous circumferential section having a radial thickness greater than the radial thickness of the continuous circumferential section of the intermediate ring segment

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16. (New) The intraluminal prosthesis of claim 8, wherein the continuous circumferential section of the first ring segment is more radiopaque than the continuous circumferential section of the at least one intermediate ring segment.

17. (New) The intraluminal prosthesis of claim 10, wherein the continuous circumferential section of the first ring segment is formed in part of a radiopaque coating.

18. (New) The intraluminal prosthesis of claim 11, wherein the radiopaque coating on the continuous circumferential section of the first ring segment is formed by dipping the first ring segment of the prosthesis in a bath of radiopaque material.

19. (New) The intraluminal prosthesis of claim 8, wherein the continuous circumferential section of the first end ring segment is formed in part of radiolucent material.